



SEQUENCE LISTING

(1) GENERAL INFORMATION:

- (i) APPLICANT: LOCKHART, David J.
CHEE, Mark S.
- (ii) TITLE OF INVENTION: SEQUENCING BY HYBRIDIZATION ON HIGH
DENSITY PROBE ARRAYS: ENZYMATIC DISCRIMINATION ENHANCEMENT
- (iii) NUMBER OF SEQUENCES: 13
- (iv) CORRESPONDENCE ADDRESS:
 - (A) ADDRESSEE: Townsend and Townsend Kourie and Crew
 - (B) STREET: Steuart Street Tower, One Market Plaza
 - (C) CITY: San Francisco
 - (D) STATE: California
 - (E) COUNTRY: US
 - (F) ZIP: 94105-1493
- (v) COMPUTER READABLE FORM:
 - (A) MEDIUM TYPE: Floppy disk
 - (B) COMPUTER: IBM PC compatible
 - (C) OPERATING SYSTEM: PC-DOS/MS-DOS
 - (D) SOFTWARE: PatentIn Release #1.0, Version #1.25
- (vi) CURRENT APPLICATION DATA:
 - (A) APPLICATION NUMBER: US 08/327,522
 - (B) FILING DATE: 21-OCT-1994
 - (C) CLASSIFICATION:
- (viii) ATTORNEY/AGENT INFORMATION:
 - (A) NAME: Garrett-Wackowski, Eugenia
 - (B) REGISTRATION NUMBER: 37,330
 - (C) REFERENCE/DOCKET NUMBER: 16528X-008600
- (ix) TELECOMMUNICATION INFORMATION:
 - (A) TELEPHONE: (415) 543-9600
 - (B) TELEFAX: (415) 543-5043

(2) INFORMATION FOR SEQ ID NO:1:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 12 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
- (ii) MOLECULE TYPE: DNA
- (iii) HYPOTHETICAL: NO
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:

TCGGATCGAC TT

(2) INFORMATION FOR SEQ ID NO:2:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 12 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: DNA

(iii) HYPOTHETICAL: NO

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (B) LOCATION: 1
- (D) OTHER INFORMATION: /note= "Base is linked to a polyethyleneglycol (PEG) spacer."

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:

AACGCGCCGC NC

12

(2) INFORMATION FOR SEQ ID NO:3:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 20 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: DNA

(iii) HYPOTHETICAL: NO

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (B) LOCATION: 20
- (D) OTHER INFORMATION: /note= "Base is covalently attached at the 5' end to a fluorescein molecule."

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:

CGCAACGCAA GCGCGGCGCG

20

(2) INFORMATION FOR SEQ ID NO:4:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 12 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: DNA

(iii) HYPOTHETICAL: NO

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (B) LOCATION: 1
- (D) OTHER INFORMATION: /note= "Base in linked to polyethyleneglycol (PEG) spacer."

- (ix) FEATURE:
 - (A) NAME/KEY: misc_feature
 - (B) LOCATION: 1..12
 - (D) OTHER INFORMATION: /standard_name= "Denoted CG"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:4:

AACGCGCATT CN

12

(2) INFORMATION FOR SEQ ID NO:5:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 12 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: DNA

(iii) HYPOTHETICAL: NO

- (ix) FEATURE:
 - (A) NAME/KEY: misc_feature
 - (B) LOCATION: 1
 - (D) OTHER INFORMATION: /note= "Base is linked to polyethyleneglycol spacer."

- (ix) FEATURE:
 - (A) NAME/KEY: misc_feature
 - (B) LOCATION: 1..12
 - (D) OTHER INFORMATION: /standard_name= "Denoted AT"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:5:

AAATATAATT CN

12

(2) INFORMATION FOR SEQ ID NO:6:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 22 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: DNA

(iii) HYPOTHETICAL: NO

- (ix) FEATURE:
 - (A) NAME/KEY: misc_feature
 - (B) LOCATION: 22
 - (D) OTHER INFORMATION: /note= "Base is covalently linked to fluorescein molecule."

- (ix) FEATURE:
 - (A) NAME/KEY: misc_feature
 - (B) LOCATION: 1..22
 - (D) OTHER INFORMATION: /standard_name= "Denoted OH1"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:6:

GATGCAGCTT CCGGAATGCG CG

22

(2) INFORMATION FOR SEQ ID NO:7:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 22 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: DNA

(iii) HYPOTHETICAL: NO

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (B) LOCATION: 22
- (D) OTHER INFORMATION: /note= "Base is covalently linked to fluorescein."

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (B) LOCATION: 1..22
- (D) OTHER INFORMATION: /standard_name= "Denoted OH2"

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:7:

GATGCAGCTT CCGGAATTAT AT

22

(2) INFORMATION FOR SEQ ID NO:8:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 10 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: DNA

(iii) HYPOTHETICAL: NO

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (B) LOCATION: 1
- (D) OTHER INFORMATION: /note= "Base is linked to polyethyleneglycol spacer."

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:8:

CGCGNNNNNN

10

(2) INFORMATION FOR SEQ ID NO:9:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 10 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: DNA

(iii) HYPOTHETICAL: NO

(ix) FEATURE:

- (A) NAME/KEY: misc_feature
- (B) LOCATION: 1
- (D) OTHER INFORMATION: /note= "Base is linked to polyethyleneglycol spacer."

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:9:

CGCGCATTCC

10

(2) INFORMATION FOR SEQ ID NO:10:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 26 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: DNA

(iii) HYPOTHETICAL: NO

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:10:

AAAGAAAAAA GACAGTACTA AATGGA

26

(2) INFORMATION FOR SEQ ID NO:11:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 15 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: DNA

(iii) HYPOTHETICAL: NO

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:11:

TTTTTTNTGT CATGA

15

(2) INFORMATION FOR SEQ ID NO:12:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 15 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(ii) MOLECULE TYPE: DNA

(iii) HYPOTHETICAL: NO

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:12:

TTTTTCNGTC ATGAT

15

(2) INFORMATION FOR SEQ ID NO:13:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 15 base pairs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear

- (ii) MOLECULE TYPE: DNA

- (iii) HYPOTHETICAL: NO

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:13:

TTTTCGNTCA TGATT